

# Stripcropping

# Oklahoma Conservation Practice Job Sheet

*585 01* 

Landowner



#### WHAT IS STRIPCROPPING?

Stripcropping is growing planned rotations of erosion-resistant and erosion susceptible crops, typically row crops, forages, small grains, or fallow in a systematic arrangement of equal width strips across a field.

#### **PURPOSE**

Stripcropping is used on sloping land where crops are grown to:

- Reduce soil erosion from water and transport of sediment and other water-borne contaminants.
- Reduce soil erosion from wind.
- Protect growing crops from damage by windborne soil particles.

## **HOW IT HELPS THE LAND**

Stripcropping is very effective at reducing wind erosion, as well as sheet and rill erosion. It is a low cost conservation practice and provides the opportunity to establish cropping system rotations.

Stripcropping slows runoff from the land and increases water infiltration. This in turn increases moisture availability for crops, improves fertilizer utilization and increases crop yields. Crop rotations can be designed to add diversity to the farming

operation as well as break pest cycles that may have developed in monoculture operations.

#### WHERE THE PRACTICE APPLIES

Stripcropping is a conservation option for sloping cropland where sheet and rill erosion is a problem or in fields where wind erosion is a concern.

Stripcropping may need to be used in combination with other conservation practices to achieve desired objectives.

#### WHERE TO GET HELP

For assistance in planning a stripcropping layout, contact your local Natural Resources Conservation Service or your local Conservation District office.

#### APPLYING THE PRACTICE

The width of the strips will need to be determined so that the erosion goal for the field is met. Keep in mind to try and install the width of the strips to best facilitate the operation of machinery. This will help to alleviate point rows.

Vegetation in the strips shall consist of erosionsusceptible crops alternated with erosion-resistant or sediment trapping crops such as grasses or

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legumes, hay crops, fallow un-tilled small grain residue or close grown crops that provide the needed protective cover during the target erosion period.

The strips in the system will be of equal widths be parallel to each other on the field.. Soil loss from the field will not exceed the soil loss objective. Widths of equipment in the operation should be considered when establishing with width of a strip. Example: three planter widths of a 15 ft planter width can accommodate a 45 ft sprayer.

### Stripcropping for Water Erosion

Fields with slopes of 2.5% or greater begin to show evidence of ephemeral gully erosion. Additional practices such as terraces may be needed to control ephemeral gully erosion on these fields. Strips will be alternated down the slope starting with an erosion-susceptible strip followed by an erosion-resistant strip.

The maximum row grade should not exceed onehalf the up-and-down hill slope percent used for conservation planning, or 10 percent, whichever is less.

# Stripcropping for Wind Erosion

Strips need to be oriented as close to perpendicular to the prevailing wind erosion direction as possible. In Oklahoma, strips designed in an east – west direction will provide adequate wind erosion protection.

#### **CONSIDERATIONS**

To manage soil moisture, select crops, crop sequence, and varieties with sufficient density and cover to intercept runoff and/or blowing snow. Manage the height of standing residues to maximize snow trapping potential,

The conservation crop rotation on stripcropped fields should be consistent with the farm enterprise crop mix and/or associated livestock operation. These will influence the proportion of row crops, close growing crops, and grass/legume crops.

Stable outlets may be necessary where runoff results in concentrated flow erosion. Acceptable stable outlets include grassed waterways, field borders, filter strips, water and sediment control basins, or underground outlets for terraces and diversions.

	Stripcropping – Design Sheet					
I	Purnose (Check all that apply)					

Reduce soil erosion by water and transport of sediment and other water-born contaminants			Reduce soil from wind erosion		Protect growing crops from damage by wind-borne soil particles			
Field	Field Width of Strips Num		ber of Strips   Erosion-Susceptible		Crop	Erosion-Resistant Crop		
Additional Design Information, Management and Maintenance								

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